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THE STUDY OF HISTORY IN SCHOOLS.

JUDGING from my own experience I should say that much of the instruction given in school on the important subject of history is fragmentary and disconnected in its nature. One term may be devoted to the records of America; another to those of Rome and Greece; and the history of England may find a place in the curriculum at another time.

If it be true—and I believe it is not now disputed—that history is development, the disconnected study of the history of different countries appears to be, to say the least, not the best mode. By pursuing it the important subject of the philosophy of history is lost sight of. It seems to me that any pupil who is capable of studying history at all, is also able to appreciate and to be interested in the natural connection that the history of any given country bears to that of others.

Is it not then the part of wisdom to begin by presenting the pupil some conception of the general nature of the subject,—by giving him a clue that will guide him through the labyrinth? In one aspect, history is a simple record of human action, and we should show that action implies *motive*. In another aspect, history is a delineation of the unfolding of a plan of the Creator, which we cannot fail to

believe, if we believe that God made the world and its inhabitants, and rules them.

These two suggestions give the teacher his plan. Let him show by his instruction in history that God has a plan, and that men have motives, which can, in some degree at least, be traced. In many instances both are very plain. Nothing can be more interesting or more clear than the motives involved in the Crusades or in our war of the Revolution. The plan of God, too, is plain enough in the history of the Jews: and in the discovery of the New World by Columbus at the particular juncture of affairs that marked the close of the fifteenth century, rather than at an earlier date.

How interesting to show the young student the traits of the civilizations of Greece and Rome—how the downfall of the Western Empire, and the mixture of blood and customs which followed, laid the foundation of modern civilization—how the system of chivalry and the shakings of the crusades, kept Europe from lethargy and civilization from death during the Middle Age!

The bright young mind can grasp the fact that there is a natural *order* in which to study European events. Let the pupil imagine Charlemagne and his court, and know that Egbert of England carried new and enlarged notions thence to his own Wessex which gave it precedence in the Heptarchy. Let the pupil remember that in Charlemagne the royal lines of both France and Germany began. Let him see how inextricably the history of Spain is connected with that of the Netherlands, and how the pope of Rome was everywhere a recognized power. Let him see the connections that exist between the royal families of Europe—how they begat the wars of the Austrian and Spanish succession, and struggles between England and France. Let the pupil see these facts, and he appreciates the truth that history is a record of motive, action, plans and of life.

To do this effectively there must be a general and methodical plan in the instruction, and, it seems to the writer, that it involves the separate study of an outline of the history of each country in connection with the atlas and chronological charts.

It will add greatly to the pupil's interest if much stress is laid upon biography and literature by the teacher. Suppose, for example, the life of the first Napoleon were made a special study. Suppose the pupil were encouraged to read some good biography of that conqueror, and perhaps to put on paper an epitome of his career. Let him be referred to any essays or poems that illustrate the subject. The trite verses on Cassibianca will undoubtedly occur to him, in connection with Lord Nelson's brilliant victory at the battle of the Nile.

Again, take the times of the Covenanters of Scotland; let the ballads of Aytoun be examined, and the "Burial of Dundee" be read. Or, when the house of Brunswick comes to the throne of England, let Thackeray's "Four Georges" be referred to, the book actually brought into the class-room, and some of its paragraphs read. When we study about the carrying-off of the Acadians from their happy homes in Nova Scotia, let us turn to the pages of our great American poet and read the touching lines that record the sorrows of Evangeline.

In fine, let there be an attention to the general course of history, with the study of one country at a time as a part of a whole, and illustrations drawn from biographic details, and from poetry and general literature. It seems to the writer, that by such means an interest will be awakened and sustained, and the greatest advantages of the study received.

ARTHUR GILMAN.

AT a school examination one of the visitors made a brief address to the pupils on the necessity of obeying their teachers and growing up loyal and useful citizens. To give emphasis to his remarks, he pointed to a large national flag spread on one side of the room, and inquired, "Boys, what is that flag for?" A little urchin, who understood the condition of the house better than the speaker, promptly answered, "To cover up the dirt, sir."

COMMON SCHOOL READING BOOKS.

WHAT should be the distinguishing characteristics of common school reading books?

I. They ought to fairly exemplify the language in which they are written. Hence they should contain the greatest possible variety of approved expressions, both prosaic and poetical; the greatest possible variety of style, both familiar (but not vulgar) and elegant; and the greatest range of thought appropriate to the age concerned. Every child should be enabled to understand and use his mother tongue as correctly and completely as possible. The earlier this faculty is acquired, the easier will be the progress in science and art, the greater the facility for obtaining an independent station in life, and the more stimulus will be given toward intellectual and moral self-improvement. A large number of people have little or no opportunity to peruse any books beyond their school readers, so that the newspaper remains their almost exclusive source of information and mental improvement. This source is often defective, so the school reader ought to supply this want; so much the more so, as by a judicious selection of reading-pieces a love for good literature may be kindled in the learners. It is especially necessary in our own country to have the greatest variety of expressions, style and thought exhibited in the school readers, because the growing ratio of the immigrant to the old native population has a tendency towards reducing the range of expressions to the absolute minimum indispensable for mutual intercourse. Most children first entering school do not understand one-half of what their teacher says, nor can they express their thoughts intelligibly, because their vocabulary contains only a very few hundred words. Of the many expressions for instance, indicating terrestrial elevation, *hill*, *hillock*, *mount*, *mountain-range*, *eminence*, *rising of the ground*, *elevation*, *peak*, *knoll*, etc., only one is generally used (and very few understood) by school children, to wit, *hill*, which is applied to elevations of every kind. The same impoverishment of the language prevails in the department of forms. The present perfect, (I have seen), the past per-

fect (I had seen) and the compound tenses generally, are almost never used in the children's idiom ; the same holds good more or less of the possessive case, the participles, the comparative and superlative degrees, and many other forms. The irregular verbs are all but universally misapplied : I seen, I done, I laid in bed, and many more such barbarisms are constantly heard. If this tendency toward impoverishment be not effectually combated in school, it will never be overcome : and if not combated by means of the reading books, no later instruction in grammar and composition will overcome it.

II. Reading and writing (pronunciation, accentuation and orthography) and the meaning of words and the intelligibility of speech (etymology, emphasis, interpunctuation and grammar) ought to be taught at the same time, so as to support each other. This can be done only by objective teaching, and by subjecting every one of these branches to a few simple rules. The English language is now-a-days, perhaps, the only one which is not taught according to rules, if we except grammatical rules, of which we shall speak below. It is an almost universal superstition that it cannot be made amenable to law, as it is so full of exceptional cases of sounding, spelling, accenting, etc. We call this belief superstitious, because it ignores the fact, that *law* underlies every kind of phenomena ; that law rules every language, English not excepted. It is no doubt true that in the dominion of the purely natural sciences law governs so strictly as to admit nowhere the slightest exception, while in language, which is but partially a natural growth, and in the whole sphere of human phenomena exceptions are met with. But it is one of the merits of the modern science of comparative philology to have conclusively proved, that law prevails even in language to an extent which, a few decades ago, would have appeared incredible. As far as English is concerned, the laws underlying the sounding, spelling and accenting are now-a-days almost completely discovered, and may be utilized in instruction. Now, there can be no doubt that it is an enormous saving of time and labor to teach these English branches according to a few rules, accompanied by a small number of exceptions rather than

to follow the present practice of teaching the sound, the image and the meaning of every single word by itself. But if this is to be done, the foundation must be laid in the primer, and the superstructure built in the first, second and third readers, so as to habituate the pupils from the very beginning to a rational understanding and use of the language.

III. The Readers ought to give as much information as possible in natural science, history, geography and politico-social life. This necessity is so evident from a consideration of the great use of such knowledge to everybody in after-life and its paramount help in forming the mind, that it is now almost universally conceded, and separate books are published to meet this want. But little is done in this respect for the benefit of the younger children who are able to appreciate a great deal of such information. That information ought to be carefully graded and adapted to the development of the learners; it ought to awaken the scientific appetites, not to satiate them; to prepare for scientific study, not to introduce it, before the age for generalization is attained; to prevent children from talking and judging on subjects which must for some time to come remain beyond their horizon. It is therefore a difficult matter to select the right kind and amount from every sphere of pertinent information, and to do it in an attractive, and yet in a correct way. The writers of juvenile reading books should of course be professional teachers of great experience, because no scientist proper understands that popular and child-like language and treatment of matter which belongs in those books. It is, however, an exceedingly rare attainment of professional teachers to be up with the contemporary standpoint of all the sciences named, and to know the best sources of information in each. Nevertheless such attainment is required in every writer of proper Readers.

IV. Readers ought to convey sound moral instruction, not by direct teachings, but by implication; not by fictive, but by historical examples of virtue and vice; and last, but not least, not by silly stories couched in cant phrases, but by the moral bearings of real facts. The moral to be con-

veyed by a reading piece should not be added to it, but should be discovered by the child, if it is to be really impressive : it should not be gathered from tales about very virtuous or very vicious children, such as never existed, because the little learners feel instinctively that such children are nowhere to be found. No moral teaching can be impressive for children, but that which is either suggested by a living model within their observation, or exemplified by historical personages, or well-known natural objects ; but every teaching of that kind is powerfully impressive, no matter what the descent or creed of the parents may be, if it be discovered by the pupils themselves under the skillful guidance of a teacher whom they respect, and in whom they confide.

V. The Readers should contain, in Prefaces and footnotes, short pedagogical hints about the uses to be made of every reading piece. This precept, we are aware, is at variance with the prejudice of some Superintendents and Boards of Education, that the tax-payers should not have to pay for the information of the teachers ; and that the pupils should not suspect the fact that their teachers need information. These views are erroneous, at least if applied to such Readers as we speak of. The latter must needs contain new methods, and must be put to new uses, new at least to many teachers, to whom the necessary hints cannot be brought home without explanations in the reading pieces themselves. The general principles and methods should be contained in an accompanying Manual for the teachers, to be published together with the Readers. Besides, those pedagogical hints should be intelligible to the pupils, as soon as they have climbed one or more rounds of the ladder of progress, so that they may be enabled to repeat for themselves what they have learned at previous stages. So long as our Normal Schools cannot turn out a sufficient number of fully prepared teachers, so long will it be economy of time and means, and to the benefit of pupils, that books should in some measure be safe guides for teachers.

VI. The Readers ought to pave the way to a gradual reform in our Dictionaries, by leading the pronunciation of

the language back to the principle of simplification, as originally intended and practised by Webster. The original editions of his Dictionary not only abolished some useless letters in the then adopted spelling, such as the *u* in nouns like *ardour*, *honour*, etc., and the double final consonant in inflections like *traveller*, *libelling*, etc.; but also carried out the truly philosophical idea, to reduce the number of different sounds of the vowels to a minimum (16 or 17), and not to mark the sound of vowels in affixes which is obscure, and in which all the vowels resemble each other. Thus he hoped to simplify the pronunciation by making it gradually more uniform, and to prepare for a gradual approximation to *phonographic* principles in spelling. It is to be regretted that the later editions of his dictionary have abandoned this plan, and now mark all the syllables to the extent of thirty-seven different vowel sounds. Now that this evil has gone on increasing, it is absolutely necessary, that a beginning of a return to simplicity should be made, and be made in a manner least revolutionary.

Some of these six principles have been followed in preparing school readers, and one or two series contain most of them. Dr. Douai, who has had large experience as a teacher, has prepared a series which claims to embody them more fully than any other. It is not an easy thing to be scientific yet not dry, to be moral yet not "goody." We are glad to see the delicate task so credibly attempted.

A WRITER in a French scientific periodical states that by feeding silk-worms on vine-leaves he has obtained cocoons of a magnificent red, and, by feeding them on lettuce, others of a very deep emerald green. Another silk-grower has obtained cocoons of a beautiful yellow, others of a fine green, and others again of violet, by feeding the silk-worms on lettuce, or on white nettle. He says that the silk-worms must be fed on mulberry-leaves when young, and supplied with the vine, lettuce, or nettle leaves, during the last twenty days of the larva stage of their life.

THE GOOSE QUESTION.

THE *Popular Science Monthly* contains an article—"Our Ancestors on the Goose Question"—which deals with an odd belief exploded only some three hundred years ago. It was thought that a certain kind of goose, still known in England as the barnacle-goose, came from the shell of a barnacle. The soft part of the barnacle was mistaken for a little bird.

But not only was it thought that these geese originated thus, but that the shells themselves grew on trees, an opinion held as early as the twelfth and thirteenth centuries. The earliest published statement of an *eye-witness* is contained in the "Cosmograph and Description of Albion" of Hector Boëce. The "Cosmographia Universalis," of Sebastian Munster, printed at Basle three hundred years ago, contains an illustration of the goose-tree and its animal fruiting. The writer who gives the most circumstantial account of this barnacle goose, is Gerarde, who, in his *Herbal*, (1633) speaks thus :

"What our eyes have seen, and hands have touched, we shall declare. There is a small island in Lancashire, called the Pile of Flounders, wherein are found broken pieces of old and bruised ships, some whereof have been cast thither by shipwreck, and also the trunks and bodies, with the branches, of old and rotten trees, cast up there likewise; whereon is found a certain spume, or froth, that in time breedeth unto certain shells, in shape like those of the mussel, but sharper pointed, and of a whitish color, wherein is contained a thing in form like a lace of silk finely woven, as it were, together, of a whitish color; one end whereof is fastened unto the inside of the shell, even as the fish of oysters and mussels are; the other end is made fast unto the belly of a rude mass or lump, which in time cometh to the shape and form of a bird. When it is perfectly formed the shell gapeth wide open, and the first thing that appeareth is the aforesaid lace or string; next come the legs of the bird hanging out, and as it groweth greater it openeth the shell by degrees, till at length it has all come forth, and

hangeth only by the bill. In short space after it cometh to full maturity, and falleth into the sea, where it gathereth feathers, and groweth to a fowl bigger than a mallard and lesser than a goose, having black legs, and bill or beak, and feathers black and white, spotted in such manner as our magpie, called in some places pie-annet, which the people of Lancashire call by no other name than tree-goose ; which place aforesaid, and of all those places adjoining, do so much abound therewith, that one of the best is bought for three-pence. For the truth thereof, if any doubt, may it please them to repair to me, and I shall satisfy them by the testimony of good witnesses."

Again says Gerarde : " The historie whereof to set foorth according to the woorthiness and raritie thereof, woulde not onely require a large and peculiar volume, but also a deeper search into the bowels of Nature than my intended purpose will suffer me to wade into, my insufficiencie also considered, leaving the historie thereof rough-hewen unto some excellent men, learned in the secrets of Nature, to be both fined and refined ; in the mean space take it as it falleth out, the naked and bare truth, though unpolished."

In 1677 Sir Robert Murray communicated to the Royal Society of England that he had seen these barnacles upon the island of Uist (East), and that every shell contained " a perfect sea-fowl : the little bill like that of a goose, the eyes marked, the head, neck, breast, wings, tail, and feet formed ; the feathers everywhere perfectly shaped, and blackish-colored ; and the feet like those of other water-fowl to the best of my remembrance." Gerarde, above referred to, says : " They spawne, as it were, in March and Aprill ; the geese are found in Maie and June, and come to fulnesse of feathers in the moneth after. And thus hauing, through God's assistance, discoursed somewhat at large of grasses, herbes, shrubs, trees, mosses and certain excrescences of the earth, with other things moe incident to the historie thereof, we conclude and ende our present volume, with this woonder of England. For which God's name be euer honoured and praised."

How the belief in this " woonder of England" originated it is difficult to decide. Max Müller suggests that it came

from an early misapplication of terms. He remarks: "No man would have suspected Linnæus of having shared the vulgar error, nevertheless he retained the name *Anatifera*, or duck-bearing, as given to the shell, and that of *Bernicula*, as given to the goose." That this curious opinion as to the origin of the barnacle-goose was held as a firm reality, is proved by the fact that it was allowed to eat these geese during Lent under the idea that they were not flesh but fish.

THE WORD-METHOD.

SUPERINTENDENT W. H. PAYNE, in a paper read before the Michigan State Teachers' Association, pays Prof. J. Russell Webb, the originator of the "Word Method," a deserved compliment. He says:—"The art of reading is the basis of school instruction, and a question of the greatest practical importance is, 'How may the child be most easily taught this fundamental art?' Two systems, directly opposed to each other in principle, are in use in our schools. The synthetical or alphabetical method requires the letters to be learned first, and then combines them into words, while the analytical or word-method teaches the child first to recognize words by their general form or contour, and thence enables him, almost unconsciously, to learn their elements or letters. As each method is the direct opposite of the other, which is in harmony with the normal action of the mind in the acquirement of knowledge?

It is a principle of inductive psychology that the mind proceeds analytically in the elaboration of its knowledge, and that therefore the word method is founded on a fundamental law of mind. This is the most important practical acquisition of the new education, and in the future, when the world's benefactors receive their award of praise, the name of Webb will be held in grateful remembrance for perfecting the natural method of teaching the royal art of reading."

*EMINENT FOREIGN EDUCATORS DECEASED
IN 1873.*

JAN. 1.—THEODORE WILHELM KRAUT, Prof. of Old German Law in University of Göttingen from 1828 to 1873, and author, died at Göttingen, aged 73 years.

Jan. 8.—JAN CONRAD HACKE MIJNDEN, Ph.D., Prof. Italian Literature at Amsterdam, and Dantophilist, died at Amsterdam.

Jan. 10.—FRANCISCO DALL'ONGARO, Professor of Ancient and Modern Dramatic Literature at Florence from 1860 to 1873, died at Naples, aged 65 years.

Jan. 25.—Viscount OLIVIER CHARLES CAMILLE EMANUEL DE ROUGE, Professor of Archæology in the College of France from 1856 to 1873, and author, died in Paris, aged 62 years.

Jan. 28.—Rev. ADAM SEDGWICK, F.R.S., F.G.S., LL.D., Woodwardian Professor of Geology in Cambridge University from 1818 to 1873, and author, died in Norwich, Eng., aged 89 years.

Feb. 10.—Very Rev. GEORGE HULL BOWERS, D.D., Dean of Manchester, founder of Marlborough, Rossall and Haileybury Colleges, and Select Preacher to the University of Cambridge, died in Manchester, aged 79 years.

Feb. 17.—Rev. CHARLES ATMORE OGILVIE, D.D., Regius Professor of Pastoral Theology at Oxford University, and author, died in Oxford, aged 80 years.

Feb. 23.—Rev. THOMAS BARCLAY, D.D., Principal of Glasgow University for many years, died in Glasgow, aged 81 years.

Feb. 24.—Rev. THOMAS GUTHRIE, D.D., founder of the Edinburgh Ragged Schools, author, and pulpit orator, died at St. Leonards-on-Sea, aged 70 years.

Feb. 24.—HEINRICH KURTZ, Ph. D., Professor of German Language and Literature at St. Gall, Switzerland, from 1834 to 1839, and of the same at Aarau, Switzerland, from 1839 to 1873, died at Aarau, aged 68 years.

March 15.—Rev. HENRY WALL, M.A., Professor of Logic in the University of Oxford from 1849 to 1873, died in Oxford, aged 68 years.

March 27.—AMEDEE SIMON DOMINIQUE THIERRY, Prof. of History in the College of Besançon from 1828 to 1829, and author, died in Paris, aged 72 years.

April 12.—SAINT MARC GIRARDIN, a French publicist, Professor in the College of Louis the Great 1827–1830; Prof. of History in the Faculty of Letters 1830–1834; Prof. of French Poetry in the Sorbonne, from 1834 to 1863, died in Paris, aged 72 years.

April 18.—Baron JUSTUS LIEBIG, Ph. D., LL. D., J. U. D., Professor of Chemistry in the University of Giessen from 1824 to 1852, and in the University of Munich from 1852 to 1873, and author, died in Munich, aged 70 years.

May 13.—Rev. THOMAS ROBINSON, D.D., Master of the Temple from 1845 to 1869, Lord Almoner's Professor of Arabic at Cambridge for many years, died in Rochester, Eng., aged 83 years.

June 14.—FRIEDRICH LUDWIG GEORG VON RAUMER, Ph. D., J. U. D., a German historian and author, Professor of History in the University of Breslau 1811–1816; Professor of History and Political Economy 1816–1853, and Emeritus Professor 1853–1873, died in Berlin, aged 92 years.

June 21.—TYLER SMITH, M.D., an English physician, author and medical professor for many years, died at Richmond, Eng.

June 21.—M. LAVALLE, a French educator, and author of several educational works, the founder of the *Ecole Centrale* of France, died in Paris.

July 8.—Rev. JOHN WILSON, D. D., F. S. A., for many years President of Trinity College, Oxford, died in Oxford, aged 83 years.

July 19.—VICTOR EUPHEMION PHILARETE CHASLES, a French author, Professor of the Languages and Literature of Modern Europe in the College of France from 1841 to 1873, died in Venice, aged 75 years.

July 23.—GUSTAV ROSE, Ph. D., Professor of Mineralogy in the University of Berlin from 1839 to 1873, and author died in Berlin, aged 75 years.

Sept. 15.—Professor JOSEF CZERMAK, Ph. D., proprietor of, and lecturer in, the Physiological Institute at Leipsic, inventor of the Laryngoscope, and author, died in Leipsic.

Sept. 19.—Professor DONATI, an Italian astronomer and professor at Florence, the discoverer of the Comet known as Donati's in 1858, died in Florence.

Sept. 20.—AUGUSTE NELATON, M.D., an eminent French surgeon and professor in the Surgical Clinic, died in Paris, aged 66 years.

Sept. 20.—JEAN JACQUES CYPRIEN VICTOR COSTE, Professor of Embryogeny in the College of France from 1835 to 1873, died in Paris, aged 66 years.

Oct. 19.—Rev. ROBERT SMITH CANDLISH, D.D., Professor of Theology in New College, Edinburgh, 1847-'48, Principal of New College 1862-1873, died in Edinburgh, aged 67 years.

Oct. 24.—F. CRACE CALVERT, M.D., Ph.D., Prof. of Chemistry in Manchester Royal Institute, 1846-1873, died at Manchester, aged 59 years.

Nov. 3.—Rev. TEMPLE CHEVALLIER, D.D., Professor of Mathematics, Astronomy and Hebrew in Durham University from 1835 and 1842 to 1872, died in Durham, aged 79 years.

Nov. 8.—AUGUSTE DEMETZ, the founder and father of the Reformatory Colony at Mettray, near Tours, France, died at Mettray, aged 77 years.

Nov. 22.—Rev. CESAR PRONIER, Prof. of Theology in the Evangelical Seminary at Geneva, lost on the *Ville du Havre*, aged 42 years.

Nov. 28.—AUGUSTE DELARIVE, M.D., Professor of Physical Science in the Academy of Geneva from 1822 to 1873, died in Geneva, aged 72 years.

Dec.—KARL FRIEDRICH NAUMANN, Ph.D., a German mineralogist, from 1826 to 1842 Professor of Crystallography in the Academy of Mines at Freiberg, and from 1842 till 1873 Professor of Mineralogy and Geography in the University of Leipsic, died in Leipsic, aged 76 years.

There were some errors in our notice of Gov. Moore in our March number.

He was born in Spartansburgh District, South Carolina, March 7, 1807, and educated in one of the colleges of his native State. He died in Marion, Ala., instead of Montgomery, and he had been President of the Board of Trustees of Marion Female Seminary from 1836 till his death.

THE TRAINING OF MEMORY.

IT is recorded of a Persian King that he could call by name every soldier of his vast army. The same thing is told of Mithridates. We read also of men who, having scanned a book once, could repeat the whole from the preface of "Dear reader" to the word "Finis." All these instances are cases of men with abnormal and wonderful memories, which are to be considered as phenomenal as a sixth toe on the foot, or as the ligament which connected Chang and Eng. There is, no doubt, considerable variation in the amount of memory possessed by average men, nor is there any law by which we can fix the proportion of memory to what we understand by the term intellect. A man might have a prodigious memory and yet be a prodigious ass; conversely, a man might think justly and forcibly, and yet have a very poor memory. Our present race of psychologists have not succeeded hitherto in their attempts at analyzing qualities of the mind. They have, indeed, collected some facts about memory which are interesting, but from these they have not been able to construct a general law. They have discovered, for example, that crows can count as high as three, and that there are tribes in the centre of Africa who have not been able to create numeral words beyond four. Even this is arrived at in a bungling fashion, in this manner: One, two, one—two, (three;) two—two, (four.) And yet this same degraded race have a vocabulary of over one hundred words; consequently, their memory must be more powerful than their numeral system would imply. A thousand anecdotes could be given of proofs of memory in domestic animals, and it is even of record that a pointer dog was taught to play dominos. Unfortunately, the record is somewhat dubious, because not only do owners of clever quadrupeds love to exaggerate their powers, but waggish country journalists are somewhat apt to invent anecdotes when news is wanting.

In our American sense of humor there seems to be a strong leaven of the exploded form of joking once popular

in England, as the "bite," which consisted of telling unmitigated falsehoods. And nowhere does this weakness crop up more prominently than in anecdotes of animals. Therefore, one must take with considerable caution the facts presented with regard to memory in the lower orders of the animal world. Enough, however, is admitted to prove that a modified form of memory is to be found in brutes.

Perhaps the most interesting feature with regard to the human memory that has been elicited by psychologists in their endeavors to find out what it is and in what it consists, is the capacity for special training which ordinary memories possess. Under this training average men are able to perform positive feats quite as a matter of course without eliciting our special wonder. The conductor of a New York Central train shows this power, or rather this possibility of training, in a strong light. His intellect and memory are below the average, and yet from the time that he becomes a conductor he accomplishes remarkable feats of memory. There are from five to eight, sometimes as many as thirteen, carriages filled with passengers in a train. He sees the ticket of each once only, and though there are several hundreds of them, he knows exactly where the new arrivals have seated themselves, where to look for them, nor does he ever trouble any of the others to show their tickets. This is a simple thing to write, but in the mind must be a complex arrangement. He must have every carriage, so to speak, abstracted in his mind with all its occupants, and the little details by which he knows them and associates them with their tickets. In No. 1, for example, old man and boy with satchel, Yonkers; fat woman with red face, Yonkers; pretty young lady, Tarrytown; plain young lady, with seal-skin jacket, Yonkers; man with red moustache, Utica; two old gentlemen, both Rome; fat lady with smart hat, and pretty daughter with ditto, Tarrytown—and so on throughout the whole carriage. Then, all the carriages are similarly treated, and the man's mind becomes a series of maps, in which every seat, with its occupant, is succinctly drawn. Should a man who has shown his ticket lose it, there will be no trouble when the circumstance is explained, for the conductor is sure to remember having seen it. And,

what is stranger, the delinquent will appeal confidently to the conductor's memory.

Some years ago there was a female who used to travel on the New York Central, and being of an avaricious and saving disposition, she hit upon the device of taking her ticket for a station thirty miles short of her destination, and then declaring after she had given up her ticket that it had been for the more distant place. The conductor, strong in his trained memory, insisted upon it that the female's ticket had been for the shorter distance, and that she must pay the additional fare; but she resisted, and the voice of the passengers being on the woman's side, she triumphed. But the word was passed among all the conductors, and the next time that the lady traveled on the line, when the conductor (not the same one) came to take the tickets, and she offered her's, he recognized her, and curtly said: "Madame, in order that there shall be no mistake this time, I'll take your ticket when you are prepared to leave the car." She saw that she was found out, and paid up without demur. All this came from training, and the woman's scheme, though ingenious, was open to this defect, that she had not taken into consideration the muscular memory of a conductor, rendered abnormally powerful by exercise and by a certain power of will which it seems human beings can exert whenever they are compelled by self-interest.

This power of volition, of willing, so to speak, that all the mental power shall be thrown into one channel, is capable of many illustrations, besides that of memory. But these are the most interesting, because they are unconscious. The conductor who tries to remember, because his bread and butter are concerned, does not know anything about the laws of volition, and would be very much surprised if he were to learn that he remembered not because he had a good memory, but because he made his memory remember. We none of us know what tremendous powers we possess if we could only throw them into one groove, as the men of one idea do. In cases of memory there are reporters who actually accomplish feats still more wonderful. To say nothing of the stenographer, who trains his memory to take up exactly as fast as he can write, and no faster, the

long-hand reporter is a curious exemplification of what can be done by training. On many journals it is not considered desirable to give lectures at full length, because readers, as a class, prefer the abridgment, and also, it is contrary to the laws of editorial perspective. As a rule, therefore, long-hand reporters are employed for lectures, sermons, etc. These men condense the address as they go along, and when the speaker has finished the report is ready. This necessitates a very peculiar mental action. The memory is employed in a two-fold operation, and the intellect is engaged in condensation at the same time. It is obvious that the speaker can speak faster than the writer can write. Therefore, the latter has to remember what the speaker has said, and to commit to memory what he is saying. He is often two entire sentences, sometimes a whole paragraph behind him, and if the speaker is very rapid, and the subject intensely interesting, he is forced to write on a slip of paper beside him, one or two words, to serve as clues for entire sentences. Leaving a great blank space, to be filled in afterward, he jumps after his man, and commences the next sentence with him. As a rule, every reporter on a paper could do this, as far as the memory is concerned, but the condensing process is another matter, and much more difficult to perform. Therefore, long-hand reporters are considerably in vogue in newspaper offices, and it is hard to find good ones outside of the Metropolis. All this comes from training. Another and still more peculiar, and still more valuable journalistic memory, is evinced by political reporters, who can sometimes gain admittance to caucuses and other places where no notes can be taken. Such reporters will carry away lists of names and a succession of facts which astonish even their newspaper confrères. This comes from higher capacity and still more powerful volition, for in all these efforts the power of the will is positively the principal factor.

Robert Houdin, the well-known prestidigitateur, recognized this fact that, by a strenuous effort of the will, in conjunction with repeated practice, the memory might be compelled to do almost anything. He and his son made it a constant habit to walk through the streets of Paris, and

taking a single glance at a store-window, notice as many objects as they could. They would then question each other and return to the window to verify. On one occasion the son Charles actually noticed seventeen objects, and strange to say, some were in the interior of the store and not in the window, in plain sight. This practice was the basis of their astounding clairvoyant performances. Houdin was once invited, with his son, to a gentleman's house to give a private séance, and as they went up stairs they passed the library door, which was partially open. In that single moment young Charles Houdin read off the names of twelve volumes and recognized the position of two busts. The gentleman, during the séance, was artfully led by the father to ask some questions relating to the library, and was so astounded by the accuracy of the medium's answers that he lost temper and accused Houdin of being an impostor who was in collusion with his servants. To pacify him he explained the manner in which his son had become possessed of the information, which the spectators declared to be more wonderful than clairvoyance itself.

Artists often train their memories in a similar fashion. Hogarth, the great English painter, used at first to sketch upon his thumb-nail the grotesque faces which he met in his ramblings. But as his memory grew stronger he used to learn them by heart, as the children phrase it, and could reproduce them on paper with undeviating fidelity. William Hart, one of the greatest of American landscape painters, has trained himself in a corresponding manner. At first he used to stop and sketch little scenes that struck his fancy, but now he commits them to memory and draws them at home. Many persons have compared these drawings from memory with the actual scenes and have found an astonishing accuracy, even in matters of unimportant detail. The writer has seen a little sepia reproduction from recollection, and compared it with the place. It was simply a pool of water, with some pollard willows in the foreground, and in the background a low slope of hills, with a cottage or two in the distance. The wonder about the matter was in the extraordinary fidelity with which the limbs of the trees had been remembered. They were abnormally projected in

every direction, forming quite a singular and somewhat complicated treillage, so that it seemed strange that any eye could have seen so much in so momentary a glance. But, like Houdin, Hart has trained his memory and his eye together, and they obey him.

All these instances prove the fact that average memories are susceptible of enormous development by training. It is greatly to be regretted that this truth cannot be utilized by the Board of Education.

In the present system of public schools there is not a basis of scientific thought. The consequence is that an accumulation of text-books covering an immense area of human knowledge represents teaching, and a steady cramming represents the education received. Neither the teachers nor the taught know anything about the things which the books are supposed to assist them in studying. The former set lessons which the latter commit to memory, and that is all. But as they are forced to learn by heart things which they do not comprehend, the habit of appealing to the memory becomes painful and irksome, and is discontinued as soon as the school pressure is removed. The will and the memory must be evoked together, or the poorest results will be obtained. John Tompkins, who cannot remember a short paragraph of his geography, is yet able to commit whole scenes of Shakespeare by heart, and can bellow in imitation of Forrest as well as the best of them. The principle of making pupils learn by heart what they do not comprehend is a gross educational blunder springing from a desire to act from conventionality rather than from thought. Committing to memory has been the fashion of all schools from prehistoric times. But the development of science and every branch of knowledge has been so great that those who are in educational authority have endeavored to march with the times by multiplying the things that have to be learned.

It is a dire folly contradicted by every one's experience. Memory is essentially discriminating, and we remember only those things which have some connection with our knowledge. If then, after years of studying, we go out into the world and remember nothing, it is demonstrable that we have not been learning the right things. What are the

right things, then, becomes the question. The man who answers it must remember that the memory is susceptible of enormous training, and that it discriminates thoroughly. Those two points insisted on, he cannot go far wrong.—*New York Times.*

INTELLIGENCE OF THE TOAD.

AT the recent meeting of the American Association for the advancement of Science, held at Portland, Mr. Thomas Hill read a note on the intelligence of toads, giving, among other interesting examples of their sagacity, a description of the means by which the creature contrives to force down inconvenient forms of food. "When our toad," says Mr. Hill, "gets into his mouth part of an insect too large for his tongue to thrust down his throat (and I have known of their attempting a wounded humming-bird), he resorts to the nearest stone," and uses it as a *pièce de résistance* in a very literal sense. This can be observed at any time, continues the author, by tying a locust's hind-legs together, and throwing it before a small toad.

On one occasion Mr. Hill gave a small locust to a little toad in its second summer. At once the locust's head was down the creature's throat, the hinder parts protruding. The toad then sought for a stone or clod: but, as none was to be found, he lowered his head and crept along, pushing the locust against the ground. But the ground was too smooth (a rolled path) and the angle at which the locust lay to the ground too small, and thus no progress was made. "To increase the angle, he straightened up his hind-legs, but in vain. At length he threw up his hind-quarters, and actually stood on his head, or rather on the locust sticking out of his mouth, and, after repeating this once or twice, succeeded in getting himself outside his dinner."

On another occasion the author saw an American toad disposing of an earthworm in the following way. The worm was so long that it had to be swallowed by sections. But, while one end was in the toad's stomach, the other

end was coiled about his head. "He waited until the worm's writhings gave him a chance, and swallowed half an inch ; then, taking a nip with his jaws, waited for a chance to draw in another half-inch. But there were so many half-inches to dispose of that at length his jaws grew tired, lost their firmness of grip, and the worm crawled out five-eighths of an inch between each half-inch swallowing. The toad, perceiving this, brought his right hand to his jaws, grasping his abdomen with his foot, and, by a little effort getting hold of the worm in his stomach from the outside, he thus, by his foot, held fast to what he had gained by each swallow, and presently succeeded in getting the worm entirely down."

METEORIC STONES.

IT is a curious and indeed a startling fact, that hot, ponderous masses of mineral and earthy matter are often projected with great force upon the earth, from the mysterious depths of space over our heads. In former times the falling of these stones, as well as other celestial phenomena, like comets and eclipses, were universally regarded with the greatest awe and superstition. The fall of a meteor in Eastern countries was supposed to be the immediate precursor of some important public event or national calamity, and therefore the precise date of each descent was carefully recorded. In China, for example, these records go back for more than two thousand years, and there are extant accounts of the fall of sixteen aerolites between the years 644 B. C. and 333 after Christ. No wonder the ignorant people of those early times were filled with terror, when the whizzing missiles, all aglow with light, dashed upon the earth, as even now, in this age of science and universal knowledge, we can scarcely regard them without a certain degree of dread. There are on record four or five cases of persons who have been killed by them ; and villages in India have been set on fire through their agency. Instances of injury it is true are rare, but since these stones are liable to fall

anywhere, at any time, it is not pleasant to reflect upon the serious catastrophes that may suddenly happen.

The stones that come down to us from above are always in a more or less heated state, and sometimes they are quite incandescent. The heat in large masses continues so long, that often they cannot be touched for several hours. Passing over the accounts of the fall of aerolites in ancient times, with the exception of that of *Ægos* on the Hellespont, which happened about the year 467 B. C., we will consider briefly some of those which have fallen within the past five or six centuries. The meteoric stone which fell at *Ægos* was of vast size, if the accounts of Plutarch and Pliny are reliable. They represent it as a great stone, the size of two mill-stones, and equal in weight to a full wagon-load. Many attempts have been made to re-discover this stone, but without success. The region where it fell has now become so easy of access to travelers, that we cannot relinquish the hope that it will yet be found, as this great Thracian meteoric mass would form an object of intense interest to every one. It must exist somewhere, as the nature of the substance renders it almost indestructible from natural causes; and as it was regarded with a kind of superstitious awe for more than five centuries, it is not probable that attempts were made to destroy it. A very remarkable aerolite fell in Alsace, in France, in 1492, just at the time when the Emperor Maximilian, then king of the Romans, was on the point of an engagement with the French army. This stone is still preserved in the Public Library of Colmar, and is regarded as an object of much interest by residents and travelers. In 1803, in the neighborhood of Caen and Alençon, France, a large fire-ball was observed at a considerable elevation, in the daytime, when the sky was clear and cloudless. It suddenly changed to a vaporous condition, which change was attended with a violent explosion, and soon after, the rattling of stones was heard among trees and buildings, over a wide area. From this exploded aerolite more than *three thousand* fragments were picked up, ranging in weight from half an ounce to seventeen pounds. The first recorded fall of an aerolite in England was in 1623 in Devonshire. Westcote, one of the quaint old Devonshire

historians, thus describes the incident: "In some part of this manor there fell from above—I cannot say from heaven—a stone of twenty-three pounds' weight, with a great and fearful noise in falling: first it was heard like unto thunder, or rather to be thought the report of some great ordnance, cannon or culverin: and as it descended, so did the noise lessen, at least when it came to the earth, to the height of the report of a petronel or pistol. It was for matter like unto a stone singed or half burned for lime." This stone, in its descent, buried itself in the ground three feet deep, and it was $3\frac{1}{2}$ feet long, $2\frac{1}{2}$ wide, and $1\frac{1}{2}$ thick. Since the fall of this stone, twenty others have been recorded in England, one of which weighed 56 pounds. This is now preserved in the British Museum. In striking the earth it penetrated through 18 inches of soil and hard chalk.

The fall of stones in this country has been very frequent, and almost every museum of any extent contains one or more specimens. The singular mass on exhibition at the Smithsonian Institute, in Washington, attracts the attention of all visitors. It is of annular form, and externally is smooth as if polished by hand. The two metals which preponderate in its composition are iron and nickel, and it is therefore a dense, heavy mass. Aerolites have fallen in every State of the Union, and in Mexico and South America, and there are but few persons living, having attained middle life, who have not seen in the heavens these fiery messengers, shooting athwart the sky, and lighting up the country for a vast distance. They are still objects of terror to the Indians in the northern and western sections, and to simple, ignorant people living upon the borders of the States. Although these stones fall everywhere, they are confined principally to two zones; the one belonging to America is bounded by 33° and 44° north latitude, and is about 25° in length. Its direction is more or less from north-east to south-west, following the general line of the Atlantic coast. A little more than 92 per cent. of all the descents of meteoric stones recorded during the last fifty years have occurred within these limits, and mostly in the neighborhood of the sea. A large number fall into the sea, and are lost, and also many descend in desert places, where

they are found by travelers. There is a vast meteoric stone now lying on the plain of Tucuman, near Otumpa, in South America, which by accurate measurement is estimated to weigh 33,600 pounds, or about 15 tons. Another has been found in Siberia weighing 1680 pounds. The British Museum has one splendid specimen weighing $3\frac{1}{2}$ tons, which was found near Melbourne, Australia. Those of our readers designing to visit London (and of course the wonderful British Museum), who are curious in the matter of aerolites, will find in the glass cases at the end of the Mineral Gallery the finest collection in the world. The number is between three and four hundred, representing a great variety of forms and sizes.

And now as regards the origin of aerolites. The ancients had four theories to account for them, three of which are too absurd to merit notice ; one, singularly enough, corresponds with our modern views upon the subject. Diogenes of Apollonia, who lived before the Christian era, in considering meteors remarks "that there are *invisible* stars as well as visible, moving in space, and that these invisible stars frequently fall to the earth and are extinguished." This is remarkable, certainly, for a pagan philosopher. In modern times it has been conjectured that aerolites come from the sun, and also from the moon. Many have supposed them to be of terrestrial origin, the material being taken up in the form of dust by whirlwinds, and condensed into a solid by some unknown chemical or physical process. This view is disproved by all reliable investigations which have ever been made. About a hundred years ago the eminent mathematicians of the time took up the subject, and by a course of elaborate calculations proved, that meteoric stones could not come from the moon, as by careful measurements of their velocity they were found to move, when near the earth, at the rate of 114,000 feet, or about $21\frac{1}{2}$ miles, per second ; whereas, if they came from the moon, they would start with an initial velocity of 8292 feet per second, and reach the earth with a velocity of only 35,000 feet per second. It was clear, therefore, that they came from a more *distant region* in space than that occupied by the moon. Biot, Laplace, and Poisson, three of the most eminent mathematicians who

have ever lived, engaged independently in these investigations, and after twelve years of labor reached results very nearly alike. These investigations alone are quite sufficient to prove the celestial origin of meteoric stones.

The metal iron enters largely into the composition of aerolites. In some specimens it has been proved to be present to the extent of 92 per cent. Seven other metals—copper, chromium, nickel, cobalt, molybdenum, manganese, and tin—have been found, and the earthy substances, augite and hornblende; also carbon, sulphur, and alumina. Altogether, out of the sixty-three elements recognized by chemists, *twenty* have been found in meteoric masses. It is to be observed that no *new* elements have been detected, a fact which is significant and interesting. Regarding aerolites as of celestial origin, the only difference we have to note between them and terrestrial substances is in the respective methods in which the component parts are admixed. The minerals are the same as those which are distributed throughout the rocks of our earth, but we have none in which they are held in similar proportions. Aerolites differ widely in chemical constitution, but in one characteristic there is remarkable uniformity. They are all of them covered with a black fused crust, or rind, which extends into the substance no more than a few tenths of an inch. This peculiar physical condition is due to the circumstance that when they strike the oxygen of our atmosphere, in their descent, they instantly ignite, but they do not remain long enough in contact with the air to become fused deep into the mass. If they traversed three or four hundred miles of atmosphere, the small portions of the largest masses that might reach the earth would be but scoria or cinders. It is probable that millions of small stones, those weighing but a fraction of an ounce, are burned in the atmosphere every year, and nothing but an impalpable dust remains, which is scattered by the winds.

It is certain that meteoric stones are not of terrestrial origin, and that they do not come from the sun, moon, or visible planets. Modern science has quite satisfactorily proved that these bodies are little planets, so to speak, traveling around the sun in orbits of greater or less eccentricity;

and that our earth in plunging through space encounters them, and they become entangled in our atmosphere and are rapidly drawn to the earth's surface. The larger masses, though probably very numerous, are yet relatively few in number, compared with the minute meteorites which flash out upon the darkness of night, as fire-balls or shooting-stars. If but six or seven falling stars are seen in an hour, it must be that the earth is passing through clusters of meteors, containing more than one hundred thousand in a region of space equal to her own volume. It cannot be otherwise than that the interplanetary spaces are thronged with these fragments, and it is probable that the stellar regions are likewise filled with them. They constitute the material of which worlds are made, and it is possible that the sun's heat is due to the incessant rain of these projectiles upon his incandescent mass.

There exist two kinds of evidence that the great universe of matter under the control of Omnipotence is constituted of elements similar to those which enter into the constitution of our planet. Not only the sun, with the attending family of planets to which we belong, but the millions of planetary systems which are scattered throughout the immensity of space, all are constructed of materials with which we are familiar. We learn first, by chemical analysis of the fragments of worlds that come to us from the regions of space, that our metals and our mineral earths alone enter into their composition; and, second, we learn by spectroscopic analysis of the light which reaches us from the sun and fixed stars, that similar elements exist in those distant orbs. This evidence, wonderful or incredible as it may seem, rests upon the substantial basis of demonstrative fact, and it suggests the pleasing thought that as there is unity in the organic material of the great universe of God, so there may be unity and similarity in the classes of organized beings which exist in the millions upon millions of worlds which crowd the regions of infinite space, regions so remote that no ray of light from them has as yet reached our little world.—*Boston Journal of Chemistry.*

DR. McCOSH'S PAPER IN THE INTERNATIONAL.

FROM one of our exchanges we take the following:—
“On a recent occasion in our literary column we gave a brief summary of the contents of the second number of *The International Review*, published by Messrs. A. S. Barnes & Co., of this city. One of the articles, however, invites a more particular notice. We refer to the one by President McCosh, on ‘Upper Schools,’ which is a well-meant effort to show the American people that their system of education, higher and lower, although it is in many respects defective, is yet not beyond remedy if they will have the wisdom to accept competent leadership. Where that leadership is to be found is modestly left to the reader to discover. The conductors of *The International* do not seem to be aware that this article is mainly a reproduction of the paper read by its distinguished author at Elmira last summer, which then seemed to have for its principal motive an attack on the so-called ‘Agricultural Colleges;’ for they announce in large capitals that all its articles are ‘original,’ by which the reader, unless otherwise informed, would naturally understand that they were originally prepared for its pages. This is in reality, however, the third (or fourth) appearance of the article. It was read before the Educational Association, published in one of the Elmira papers, and in the volume of proceedings of the Association, and now, with considerable but not essential changes, adorns the pages of this *Review*. The Scotch have a proverb which seems precisely applicable: ‘Cauld kail het again,’ they say, ‘is aye pat tasted.’ Or, as we might put it, ‘Cold broth warmed over tastes ever of the pot.’ There is, however, one modification of the paper as read that deserves mention. At Elmira, Dr. McCosh asked, ‘Why should the excellent college at New Brunswick, managed by a few Dutchmen, get \$50,000 a year, and Princeton, with its new School of Science, receive nothing?’ The tone of this allusion to Rutgers College was a matter of common remark at the time, and to many of the author’s admirers it seemed incredible that he should have employed the

words attributed to him. In the present article the form of expression is changed in such a way as to suggest a rivalry of denominational interests—a change which, to say the least, strikes us as not entirely ingenuous. We give the author's words, thus: ‘The college at New Brunswick is a good one, under the control of members of the Dutch church, but why should 'it get so many thousands a year, when its neighbor at Princeton, connected with the Presbyterian Church, receives nothing?’ Dr. McCosh adds, with some ostentation, that ‘Princeton asks nothing.’ But when the original land-grant was given to the State of New Jersey, Princeton *did* apply for it, but the Legislature of the State gave it to Rutgers, not because it was a denominational institution, but because it was thought by an overwhelming majority of the Legislature to deserve it. It may be well to add here that Rutgers College, instead of having received \$50,000 a year, as was intimated by Dr. McCosh at Elmira, has in fact received only a fraction over \$6,000 a year.”

GERMAN LIFE IN THE XVI AND XVII CENTURIES.

THERE is a wide difference between the “good old times” as we picture them to ourselves and as they actually were. We mean particularly in the matter of physical comforts. A writer therefore who can really set us back into the life of a century or two centuries ago, does a real service by showing us how much better off we are than our ancestors, thus making us contented with, and thankful for, our present condition. Such a retrospect has also an historical interest. For the latter reason we will look in at life in Germany in 1560, as it is portrayed by Gustav Freytag in his “Pictures of Germany in the Middle Ages.”

Instead of a house in old German style, situated in an English park, we find a gloomy pile upon a hill, exposed to the violence of the weather, or in a low marshy ground,

surrounded by vile odors arising from the swamps. Three generations ago small panes of glass have been inserted in the windows, and large tile stoves warm the dwelling room. The room itself is small, though well adapted for defence in case of attack from hostile neighbors or from a band of roving bandits. The house is uncomfortable and dirty. It shelters many besides the family of the master, younger brothers or cousins, with their families, and numerous servants, among them many of doubtful antecedents. Children quarrel in the court, and women squabble in the great kitchen. The children grow up among horses, dogs, and servants, paying little attention to education, preferring to go to the woods with the villagers to gather wild pears and mushrooms to be dried for winter use. The mistress of the house, the head manager and doctor, is accustomed to associate with rough men, and to defend herself from the abuse of her drunken husband. But she is true to him, is frugal, and proud of the family coat of arms and treasures, such as gold chains, gold brocade and the like. Her wifely affection sometimes finds expression in face and gesture, but what was thought proper in princely houses of that time, would now be judged unbecoming in the wife of the commonest day laborer.

The life of the master of the house is passed partly in idleness, partly in the wildest excitement. Hunting is good. A few clearings have been made, but for the most part the ancient monarchs of the forest are permitted to die undisturbed by the axe. The howling of wolves is to be heard at night. With spear and bow the hunters sally forth against the deer, wild boar, and beasts of prey. But whoever hunts alone, even on his own grounds, must arm against enemies other than the bear, for there are few preserves about the right to which there is not a dispute. Besides, there is the peasant, a mortal enemy to the game, since it devastates his fields, and not the less so to the lord of the manor for punishing his trespasses with imprisonment. A treacherous arrow is often discharged in the gloom of the forest, an arrow not directed against the game. Or perhaps an armed band suddenly appears, and then begins a hunt among men, a hunt for human life and liberty. When the

game is brought home there is a feast, with endless drinking and unrestrained tumult; there is scarcely a night that the company separates without being intoxicated. At this period of German history, drunkenness is a national calamity, destroying the manhood of princes and nobles, burgers and peasants. So it goes through the week. On Sunday the family attend the village church and hear an interminable sermon, full of hate against the Calvinists and Papists, a fanatical threatening with the torments of hell, or a dreary prophecy of the near approach of the day of judgment. Sometimes the subject of the discourse is the pride of the lord of the manor, his drunkenness, or his stinginess towards the servant of God.

The intercourse with strangers is slight and irregular. Newspapers are eagerly bought from wandering peddlers. They are small sheets printed in the cities on extraordinary occasions, and give unreliable accounts of a battle between the sons of the Turkish Sultan, or relate the vagaries of a bewitched girl. The favorite home reading is the astrological nonsense of William Friese, an account of the funeral of the Emperor Charles V at Nuremberg, or a recital of the happy end of the pious King Christian of Denmark. This life, worthless, and monotonous notwithstanding its frequent excitements, is occasionally varied by finding a man murdered, or by accusing some old woman of the village of practising witchcraft. Then a trial is begun, in the first case indifferently and slowly prosecuted, in the later eager and blood-thirsty.

The peasant is greatly oppressed. He is obliged to pay so much in produce and in money that it takes nearly all his earnings. Still the produce is of little advantage to the master, for the roads are so bad and unsafe that there is no market for it. It supports his family, but the cash income is small. Prices have increased during the last generation. Gold is brought from America, but it gathers in the manufacturing cities; little of it comes to the country, only enough for the purchase of clothing.

A century has passed, and we write 1660. The great German war ended twelve years ago. The castle has been destroyed. Foreign soldiers have bivouacked there and

emptied granaries and chests, and destroyed the furniture. From the ruins of the old castle a new house has been erected, unornamented, and dreary looking, but strong. Its windows look down upon a village whose houses are only partially rebuilt, and upon fields which have only lately been brought back to their old productiveness. The flocks of sheep are as large as formerly, but there is a scarcity of horses, and the peasants have learned to plow with cows. The lord of the manor does not support troopers and war-horses any more; in the carriage house stands a coach, a clumsy affair, suspended on leather straps, very uncomfortable, but none the less the pride of the family. The house is still surrounded by walls and trenches and provided with a draw-bridge; heavy iron work protects the entrances, for the country is still unsafe. Gypsies and bandits infest the neighborhood, and outrages perpetrated by masked men are the usual topic of conversation.

The castle and village have grown more quiet and orderly; indeed the respect for order has greatly developed in Germany, and the master keeps a sharp eye upon peasants, children, and servants. The village school is in a sad case. A poor divinity student instructs the children of the castle. In public the lord of the manor wears a wig of flowing hair, and at his side is a slender sword instead of the heavy one of former days. His style of talking is like his manners, stiff and formal. The burgers address him as "your lordship," and his unmarried daughter is known as "mademoiselle." His wife still carries the keys at her side, but when a visitor is expected, the spinning wheel is put out of sight, and a new toilette is made. The family treasures, such as silver cups and plates, are displayed, and a servant capable of "doing the polite" is put into livery. The visitor appears as a fashionable man, in a dress adorned with lace, and wearing a wig. He exchanges tedious compliments with the ladies; he is "the humble servant of the renowned and beautiful ladies," he praises the daughter's English figure, calls her a "conqueror of hearts," and listens to the conversation with unworthy ears." But these fine speeches are only a thin cloak concealing rude man-

ners and degraded morals; they are often interrupted by low expressions and oaths. When compliments are exhausted, the conversation turns upon matters boldly indecent. The women are accustomed to hear and answer such things, not with the ingenuousness of former days, but with an affected displeasure, for it is possible to tell even an indecent anecdote in a fashionable way. When conversation lags wine is produced, and finally there is a smoke after the old German fashion.

The master of the house, if he is a person of refinement, snuffs from a silver box. He hunts the wolves, which have increased in numbers and boldness during the war, but he does not mount his charger as an armed knight. His armor is rusted, his independence is gone, his ruler carries on the wars. If a younger son wants an appointment as ensign in the imperial army, his "serene Highness' most obedient servant" goes to court to ask for it. He is still a devout man, never omitting the blessing at meals, but he has come to dislike sectaries, and has grown tolerant of the Romish church and the Jesuits.

The village pastor has lost some of his spiritual pride, and endeavors to eke out his pitiful salary by a little farming. He regards an invitation to dine at the castle as a great honor, and it is his duty to laugh at the host's jokes and to discuss the news of the day from a spiritual standpoint. On the birthday of his patron's wife, he has the honor of presenting a bombastic poem written in Alexandrine verse, in which he calls upon Venus and all the Muses and Graces to celebrate the event in Olympus.

On market days the newspaper comes from the city. The ladies read tedious stories about noble Tartar or Roman lovers, or perhaps the loves of some people which never existed. The master of the house talks politics, and has grown to admire everything French. He attends the legislative body, of which he is a member, but only to see to it that his own rights are not infringed upon. Germany is to him an undefined geographical idea. He rarely thinks of it either with love or with dislike. He is interested in nothing beyond his family, the rights of his order, and the people who happen to depend upon him.

SPELLING.

JOSH BILLINGS says: "I hold that a man hez jest az much rite to spell a word az it is pronounced, az he hez to pronounce it az it ain't spelt," and his doctrine apparently has many advocates. Either from principle, or for some other reason, the number of those who "spell a word az it is pronounced" rather than as it is laid down in spelling-books is very large. We recently saw a letter from a U. S. official of high position which contained the words, *becomeing hazard, meintime, and bespeake*. Another from a school trustee spoke of a certain *papper*, while the principal of a high school in a New England town, wrote for a history relating events at the time of the Christian *Erie*. In Elizabeth, N. J., twelve would-be teachers who presented themselves for examination were given twenty-four words to spell. One applicant spelled two correctly, another three, one or two spelled nearly all, but none spelled every one. *Mannagerry, Numonia, Paralel, Nitch, Belleta, Crocha, Mischiefous, Croqua, Schoharry*—these are some of the specimen words as copied from the examination papers themselves. The editor of the *Indiana School Journal*, while attending the State Institute at Vincennes, offered a premium to any member who would spell correctly ninety-five per cent. of the following words: "Emanate, surcingle, siphon, conferrable, repellent, transcendent, ellipsis, resurrection, resistible, salable, incorrigible, refutable, indispensable, discernible, chargeable, ostentatious, caterpillar, tranquillity, admissible, tenet." Of the eighty-nine teachers present but one was able to perform the feat. Thirty-nine misspelled more than half the words, and one missed them all. We might enlarge this list almost indefinitely, but it is already long enough to show that there are a great many people who ought to know how to spell correctly, and yet do not.

Those who have the old fashioned reverence for spelling will see with uneasiness the number of teachers which the list contains, and think that they have discovered the reason why so many children spell incorrectly. Teachers should certainly be able to spell, but we do not think their inability

to do so is the cause of a like inability in pupils, for in spelling lessons the book is always at hand to correct any errors which may occur. We should rather look for the fault in the method of teaching this study. The great fault is, teaching so many words which the pupil will never have use for. In one of the popular spelling-books of the day we find such words as asseverate, salivate, noctograph, peripatetic, toxicology and guaicum, words, the meaning of some of which, we must acknowledge, we do not know after having spelled them. To give children such words to memorize is not only a waste of time, but it burdens the mind with unusual words and thus makes it difficult to retain those in every day use. So we would suggest as an unvarying rule to teach children only those words which there is some likelihood of their using. For young pupils simpler words should be used, such as dog, cat, father, mother, barn, house and so on, words which are constantly on their lips. Older pupils must of course have more and harder words to spell as their vocabulary increases, still even the oldest should not be obliged to memorize useless words. It is a waste of time and effort.

Lord Bacon said that writing makes an accurate man, or something like it, and it is especially true in spelling. So our second rule would be to have children take down words as dictated by the teacher, if their handwriting is sufficiently formed not to be injured by such an exercise. When a mistake is made it is there in black and white, and it cannot be got around by a well-timed correction, made at a hint from a fellow pupil or from the teacher. The correction is there too in black and white as a constant reminder. These two rules are general and very simple, but we think they may be applied with advantage in all cases. Every teacher will, of course, make additional regulations in regard to this study. They must be suggested by circumstances. In some places we see that the old-fashioned spelling match has been revived with advantage. English certainly is a difficult and illogical language, but we have it on our hands with no prospect of a change for the better, so we might as well make up our minds to learn to spell it correctly.

VENTILATION IN NEW YORK SCHOOLS.

A COMMITTEE appointed to examine some of the public schools of New York City report unfavorably as to their sanitary condition. Ten schools, in old and new buildings, including the new Normal College, were visited, and it was found that the appliances for ventilation were insufficient or utterly useless. There is often a good show of cowls upon the roof, and of ventilating registers inside, but they are not connected. The heated air which finds its way up through these registers is discharged in the space under the roof. Instead however of going out through the ventilators, it is chilled by contact with the roof, and falls into the room again. This of course does not give a supply of fresh air, it simply cools the vitiated air and sends it back again. It is not that we do not spend money enough to secure proper ventilation that we are so poorly furnished with fresh air. The ventilating apparatus at the new Normal College must have cost from thirty to forty thousand dollars, and yet an examination of the registers disclosed the fact that there was no current of air passing out through them. The committee, which publishes its report in the *Sanitarian*, says "there is not one single foot of regular fresh air supply provided for in the entire building." It is difficult to understand this lack of proper ventilation, since many small cities are far in advance of us in this respect. We certainly spend money enough to have fresh air to breathe, and it seems as if we ought to get it.

DR. SCHMIDT, Professor of Astronomy in the University of Athens, has just completed his great map of the moon. It is two metres in diameter, and is a marvel of accurate mapping and minute draughtsmanship. The shading is so exquisite that any part of the map may be examined by a lens without the appearance of coarse or rough work. The map represents the labor of thirty-four years, and is without doubt one of the greatest astronomical results of the century.

THE NEW STATE SUPERINTENDENT.

WHETHER a State Superintendent of Public Instruction should be elected by the Legislature, or appointed by the Board of Regents, is still an open question, but the elective system has certainly been vindicated by the choice of Hon. Neil Gilmour to succeed Hon. Abraham B. Weaver. He was of course chosen by a political party, and perhaps as a party man, but from his antecedents, we think that the new superintendent will not allow political considerations to influence his official actions.

Mr. Gilmour was born at Paisley, Scotland, in 1840, and is consequently thirty-four years old. He received a thorough training for college, but was unable, through lack of means, to complete his course in his native country. He determined therefore to embark for America, and arrived here at the age of sixteen. He immediately entered Union College, where he enjoyed the instruction of such men as Dr. Nott, Dr. Hickok, Dr. Lewis, and others, and in 1860 graduated, standing among the first four in a class of over a hundred. He provided himself with means to pursue his course by keeping a college book store. After graduation he taught for a year in the Academy at Corning, N. Y., and subsequently he was engaged as a teacher in Ballston. During this time he was studying law, and, after a careful preparation, was admitted to practice. In the political campaign of 1872, he was for several weeks on the stump, and to the favorable impression then made, is probably due his hearty support by some of the best men in the Legislature. He has been twice elected School Commissioner, and the experience gained while serving in that capacity, coupled with his practical acquaintance with teaching, give him a good preparation for the duties of his present position.

Mr. Gilmour is in the best sense a self-made man, his education, and his every other attainment, being due solely to his own efforts. His past life and success, when taken in connection with his sterling personal worth, warrant us in predicting a vigorous and efficient administration of our educational affairs.

CREAM OF THE EDUCATIONAL MONTHLIES.

THE *Connecticut School Journal* in its opening article commends the decision of Judge Lord of Roxbury, Mass., that the parent and teacher possess concurrent jurisdiction over the pupil on his way to and from school. This may be good law, but it is very poor common-sense. The teacher's authority and responsibility should be confined to the school-room. It is manifestly unjust to hold him in the least responsible for the doings of fifty unruly boys on their way home around Robin Hood's barn. "Respect for Children" argues, very justly we think, that we should be more considerate towards the little folks, and not snub or ridicule them. To treat them with consideration is the surest way to develop regard for others feelings. What with neglect, or downright snubbing, they often have a hard time of it. We would add another suggestion which naturally grows out of the subject. We should oftener praise the little ones when they deserve it. Judicious praise goes a long way towards developing the traits commended. If you praise a child for politeness he will try to be polite. "Tours of Observation among the Schools" is continued, and we notice also a good paper on "Standing in the School-room."

"A Defect in Graded Schools" is commented on in the *Massachusetts Teacher*. The defect is that, because of the present arrangement of studies, children have to attend school all the time or not at all. This excludes those who have to work part of the day. To remedy this it is proposed to organize schools with a half-time course of study, which shall include only the more essential branches. Such an arrangement would also benefit those physically unable to take a full-time course. The plan is certainly worthy of consideration. The question of the instruction of working children grows in importance as the prospect of making education compulsory becomes stronger. If such a law is enacted we must support uncared-for children, or arrange the course of study so that they may attend school and still support themselves. The latter plan would be better for them and for us. The gist of the article on "The Right

Proportion of Male to Female Teachers" is, that children after the primary stage, should systematically come under the influence of both sexes. It is undoubtedly true that men and women exert different influences upon children, and that where these are equal the best results are obtained, but it does not follow from this that the number of male and female teachers should be equal. Only a small part of our education is obtained at school, most of it is acquired at home or in social intercourse. Women are naturally so much better teachers for children than men, that we should lose by lessening their comparative number. The *Teacher* contains a "Vermont Department" which is to be a permanent feature. There are further, an excellent article on "Objective Teaching," and a continuation from March of "Segmentation."

Dr. Adolf Douai, writing on "German and American School Matters" in *The National Teacher*, makes some statements regarding German schools which are new to us. He says that the elementary schools have deteriorated since 1848. The governments found that they fostered liberal opinions, and therefore drove away the teachers and lowered the standard of learning. The Universities have however defeated these illiberal tendencies, by maintaining a high standard of scholarship, and by preserving their independence. This view of the policy of German governments is entirely at variance with that generally entertained. "The Recitation—Miscellaneous Suggestions" is a collection of school-room hints which have recently been given in educational journals. Most of them we can heartily endorse, such as giving the whole attention to the recitation if possible, insisting on promptness, accuracy, and clearness in reciting, and so on. But we do not see the necessity for the teacher to stand while hearing a lesson. When one recitation immediately follows another it amounts to standing all day, not an easy thing to do. "Taking Notes" advises teachers always to be on the look-out for bits of information for their pupils. Thus interesting lectures on trees, birds, fishes, or flowers, may soon be prepared. It strikes us that we have seen the same article somewhere before. A very well done "Editorial Department," and some "Book Notices," complete this number of the *Teacher*.

EDUCATIONAL INTELLIGENCE.

CALIFORNIA.—The Superintendent of Public Instruction, in his biennial report, discusses the evils of illiteracy, and argues that the only way to overcome them is to enact a compulsory education law. In support of his position he quotes the opinions of prominent American educators, drawing largely also upon the experience of foreign nations. He touches upon another important point, the inadequate means of instruction in the rural districts. Not quite half the districts maintain schools for eight months in the year. The reason of this is that some localities are thinly populated and cannot afford to support schools for more than three or four months. To remedy this, the Superintendent suggests that the richer districts be taxed to help the poorer, so that the latter may not be overburdened. The total number of children, between the ages of five and fifteen years, is 141,610. Of these 71,170 attend public, and 12,507 private, schools. The total receipts for 1873, including balance on hand at the beginning of the year, were \$2,551,779.07.

COLORADO.—Hon. Horace M. Hale, who has been called to fill the unexpired term of the former Superintendent, Hon. W. C. Lothrop, reports that educational matters are in an encouraging condition. In two years there has been an increase of sixty in the number of schools, and during the same time school attendance has increased 1,561, the number enrolled in the public schools being 7,456. The school population, that is those between the ages of 5 and 21 years, numbers 14,417. Many new school buildings have been erected or are contracted for. The Superintendent uses an excellent term when he calls the employment of cheap teachers *extravagant economy*. The salaries of male and female teachers are approaching equality, and in some counties males receive the least. The report argues that while corporal punishment should not be generally used, the teacher should have the right to apply it in extreme cases.

FLORIDA.—The great need in this State is first-class primary schools, such as will fit pupils to enter the high school for a business education. The grade of learning

most earnestly desired by the people is that which can be turned to immediate practical use in the work-shop, store or on the farm. There are 500 public schools, with an attendance of 18,000. \$8,800 has been received from the Peabody fund during the past year.

GEORGIA.—The State School Commissioner devotes part of his report to the discussion of the best means of raising school funds. He does not advocate a large general tax, but thinks only enough should be provided by the State at large to stimulate local taxation. The present sources of revenue will yield a State fund of a little over \$250,000 annually, and the Commissioner does not desire to see this fund largely increased. Other taxes might raise the amount to \$325,000. This would keep the schools open for three months annually. The main reliance should be on local levies. The census of 1870 gives the number of children, between the ages of five and eighteen years, as 407,516. According to the same authority there were 2,434 teachers of all kinds.

KANSAS.—The Superintendent of Public Instruction congratulates the people of Kansas upon the progress made in educational matters. Notwithstanding poor markets and the money stringency, a high degree of prosperity has been realized. The number of school-houses has increased 696, and the whole number of pupils enrolled amounts to 121,690; an increase of 15,027 over last year. We are sorry to note that the average wages of teachers have decreased, as has also the average length of time that school has been taught. The improvement of the schools is said to be the result of efficient county superintendency. The Superintendent affirms that not more than one-fourth of the Kansas teachers are fitted for their positions.

TEXAS.—The maximum number of schools organized during the past year is 1,874, at which 83,082 pupils attended. Educational affairs appear to be generally demoralized. The teachers are irregularly, and often very inadequately, paid. No aid has been received from the Peabody fund, because the Legislature cut down the school year from ten to four months. The laws by which that found is administered prohibit assistance under such circumstances

CURRENT PUBLICATIONS.

THE necessity for more and better technical education for our artisans and laborers is but just impressing itself upon the public mind. In Europe the subject has been carefully considered. The various governments have from time to time appointed commissions to investigate the state of labor, and to decide whether it would be advantageous to increase the amount of technical education imparted in the common schools. The reports of these commissions have been collected by *Mr. Charles B. Stetson*, and these, with some suggestions as to special instruction for American workmen, have been published under the title of "Technical Education."

It is needless to repeat the questions proposed to the different manufacturing interests, or to give their answers in detail. It is the almost universal testimony, that educated workmen are the most economical for the manufacturer, even though the wages paid them far exceed those paid to others. France has given this subject more careful study than any other country, and has increased the amount of special instruction given to workmen. The result is that French workmen command higher wages than others, and are still considered the cheapest to employ. England, according to the published reports, has in many cases been driven from the market by France. Where she has been able to hold her own it has been largely due to the French workmen whom she has imported. From her experience, and that of other countries, we may conclude, that the country which most thoroughly educates her workmen is the one which will produce the best and cheapest articles.

This is not without a lesson for us. We are so isolated that we are apt to think there is nothing for us to fear from foreign markets. This is all a mistake. Steam and electricity have so reduced distances, that we are brought into active competition with all parts of the world. The price of the crops in California is affected by the yield upon the shores of the Black Sea, and the Ohio wool-grower must compete with the Australian herdsman. As a matter

of self-defense, therefore, it becomes necessary for us to consider what technical instruction shall be given in our public schools, and how it shall be given.

To answer the first question we must turn to Europe for information. The French method, the one which has been most successful, is to let all pursue the same studies up to a certain point, and after that to branch off into specialties. Of all studies, after a good foundation has been laid, the most useful is drawing. The carpenter, machinist, mason, ship-builder, architect and designer all need it. It is not necessary that all should be able to draw original plans, but they should know enough of it to readily understand a drawing and to be able to work after it. For the dyer a knowledge of chemistry is indispensable. The English manufacturers report that, through want of a thorough acquaintance with the principles of this science, large quantities of goods are spoiled and wasted. Machinists should understand the laws, as well as the practice, of mechanics. The agriculturalist, who is ignorant of chemistry and natural science, works at a disadvantage. Let it be understood that these views of the needs of workmen are not dictated by a regard for their welfare, which some might call sentimental; they are based solely upon the advantage of the manufacturer.

How to teach the branches proposed in the common school, and yet not lengthen the years of study, is a difficult question. Mr. Stetson decides it very sensibly. He proposes to condense the studies, if we may so express it. For example, in spelling we learn thousands of words which we never have use for, in geography we memorize numberless facts which it is impossible and useless to retain. So it is in grammar and history. By learning only those things which we need, we can greatly shorten the course of study and obtain time for drawing, chemistry, and mechanics. It will not do to wait until our artisans are grown up, and then try to educate them by evening schools. We must begin in the primary schools, and so arrange our studies as to require no more time than at present, and yet carry the pupils far enough to give them an intelligent understanding of their work.

Mr. Stetson's book is so largely composed of extracts from reports that it can hardly be considered an original publication. He has presented his views clearly, and has cited the experience of others to prove his positions. The case is made so strong that there seems to be no necessity for further argument. To compete with educated labor we must have educated labor, and the sooner we get it the better.

Mrs. E. B. Duffey has written a reply to Dr. Clarke's Sex in Education, which is entitled "No Sex in Education." As the title suggests, it is diametrically opposed to Dr. Clarke's views, or rather to the views with which Mrs. Duffey credits him. As we understand it Dr. Clarke did not write his book to show that women are incapable of receiving as much culture as men, but that the man's way of obtaining knowledge is not the best way for women. Whether his arguments are sound or not, the fact remains that the object of his book is to find such a system of female education as shall produce the best results. Mrs. Duffey proceeds upon the assumption that Dr. Clarke opposes the most thorough female education. That part of her book therefore which is devoted to refuting these views is of little value.

As an exposition of the subject from a woman's standpoint, No Sex in Education is worthy of perusal. Dr. Clarke, who has had large professional experience, says that the persistent method of study pursued by boys is injurious to girls; that the latter require a periodical remission from labor. Mrs. Duffey, who has also had large experience in the matter, affirms that such a periodic rest is not only unnecessary but injurious; that giving a girl the idea that she will be sick once every month will make her so. This is the question to be decided; whether girls can safely follow boys method of study or not. To decide this we must turn to the experience of those who have pursued both methods. Dr. Clarke cites some examples of young women whose health has been ruined by persistent study; Mrs. Duffey brings forward testimony from colleges and seminaries where identical co-education is in vogue, to show that girls are not physically injured by unremitting study. So far as we have

been able to observe the majority of physicians have inclined to Dr. Clarke's views, but those women who have expressed an opinion mostly oppose them.

The Putnams, who have done so much towards giving the public cheap editions of good works, have published "The Portable Atlas," consisting of sixteen maps. The drawing is good. The coloring does not offend by the glaring contrasts which some atlases present, but still there is enough distinction in shades to clearly mark the different divisions. The book shows its British origin in that seven of the sixteen maps are devoted to England and her dependencies. For American use it would have been better to omit New Zealand and give us two maps of the United States, instead of crowding it all on one map.

MISCELLANEA.

THE 28th of May, being the birthday of the late Louis Agassiz, has been appointed for taking a collection from the teachers and pupils of the whole country, in sums of any amount, to be called the "Teachers' and Pupils' Memorial Fund," which will be kept separate from the general Memorial Fund, and its income applied to the expenses of the Museum. Remittances should be sent to Mr. James M. Barnard, Treasurer, Room 4, No. 13 Exchange St., Boston. It is to be hoped that every school will contribute something towards this most appropriate monument to Agassiz.

THE following letter, received by a New York Publishing House, signed "Hon.—" (we suppress the name) would seem to give rise to the question—Who go to the Legislature?

Amsterdam feb 13th 1874

Dear Sir i Wood Like to By one of thoas valluble Books named mental and Social Culture. Pleas Send the Book to Sum of the Amsterdam news Dealers So that i Can Pay for it Here.

THERE is a very good system of school savings banks in Ghent which might be imitated here to advantage. The schoolmaster receives and records small sums from his pupils, and when these savings, in the case of any one pupil, amount to a franc he deposits them in the savings bank and hands over the receipt. Next day the certificate is returned to the schoolmaster, who keeps it, in order that the investment of subsequent savings may be recorded upon it. In six years the school children of Ghent have deposited, under this simple organization, sums of money to the amount of \$26,047.

"Mamma, can't I stand on my head like Robbie?" "No, my child, that isn't nice for little girls." "Oh then I'll wait until I get bigger."

THE Khedive of Egypt is collecting the great treasures of Arabic literature scattered over his dominions into a library at Cairo, where they will perhaps be used to settle many ancient historical questions. Some of them are very old, one copy of the Koran dating from A.D. 720, and being written on the skin of gazelles in Cufic characters, and in colors black, red, and gold.

A VERY independent critic was the poet Laureate of an ancient Persian Shah. The latter was himself a poet and one day gave his subject some of his verses to read, and asked for his opinion of them. "May my soul be your sacrifice," said the Laureate, "they are bosh." The insulted sovereign exclaimed, "He is an ass—take him to the stables." And the order was literally obeyed. After a short time His Majesty sent for him again, and read some more of his verses. The poet walked off without a word. "Where are you going?" cried the Shah. "Back again to the stables," answered the undaunted Laureate.

The recently adjourned Illinois Assembly passed an act prohibiting all educational officers of the State from excluding, directly or indirectly, any child from the schools on account of the color of such child. Any school officer disregarding this injunction is liable to fine. The Assembly also passed an act making it necessary that every teacher

shall hold a regular certificate, thus abolishing the provisional certificate.

THE trustees of the Normal Schools of Maine have added one year to the course of study, and agreed that the course shall embrace Latin, French, and the higher English branches, to such extent as shall fit graduates to teach the Free High Schools, so many of which are coming into existence in the State.

THE Ashantees are evidently anxious to adopt the ways of civilization. A correspondent, writing from Cape Coast Castle, says: "I suppose you heard that the Ashantees could not understand our telegraph, and so they, in imitation, carried a line of white cotton from tree to tree all along the road, passing it here and there through rags of white calico."

THE curious in cats will be pleased to learn that there is one of the dear creatures in Lansing, Mich., over thirteen years old. She has but one tooth. During her prolonged career she has exhibited a propensity for nursing pups, and at one time took charge of a brood of chickens. An attempt to release her from the burden of life, by poison, totally failed.

IT is remarkable that every day in the week is by different nations devoted to the public celebration of religious services. Sunday by the Christians, Monday by the Greeks, Tuesday by the Persians, Wednesday by the Assyrians, Thursday by the Egyptians, Friday by the Turks, and Saturday by the Jews.

"GOOD Man Gone to Roost," was the head-line in a Western paper's obituary. That proof-reader was admonished.

That is not so bad as a paper which closed a glowing obituary upon a lady by saying, "She has gone to her eternal roast."

THE name of the State Superintendent of Texas is Dr. O. N. Hollingsworth, and not Hollingshead, as was stated in our March number.

PUBLISHERS' DEPARTMENT.

THE Testimony concerning How to Teach continues to come in as vigorously as ever. A few extracts from prominent Educators are appended:

Warren Johnson, State of Maine.—"I give it my unqualified recommendation. It should be in the possession of every teacher and school officer in the State. It would make an excellent general or topical text-book for teachers' institutes. The authorship alone ought to be a guaranty of its completeness and general adaptation to our present school wants."

A. N. Fisher, State Sup't, Nevada.—"I regard it a work of great value in the profession. I should be very glad to see it in the hands of every teacher in this State. I like its spirit and method and matter, and shall give it a place in the official list of 'Books recommended for the use of Teachers.'"

S. N. Fellows, Prof. Didactics, Iowa State University.—"I have examined 'How to Teach,' and most heartily endorse it as a work of great practical merit. As a book of plans, methods and suggestions, it is unequalled. I shall introduce it as a Text-Book into my class."

W. W. Waterman, Supt. Schools, Taunton, Mass.—"I am pleased to find it free from the speculative theories too common in works for teachers. It takes the superintendent and teacher into the *real* school, and suggests methods which have been tested by actual and successful school-room experience. It is what our teachers need—a manual which will serve as a practical aid in *actual school work*."

T. Severn, Supt. Schools, Reading, Pa.—"I am so well pleased with it, that I shall grade the schools as required by 'How to Teach.' Each teacher must necessarily have a copy."

H. O. Phillipson, Baggettsville, Tenn.—"I am delighted that the book of books for practical teachers has come at last. I consider it my duty to do all in my power to increase its circulation all over the State."

The Great Animal Painter.—The *British Quarterly Review* said some years since of Sir Edward Landseer: "If there be one painter of our time who deserves praise for labor united with genius, it is Landseer. He has no rival. To the power of expression which he shows in his pictures of the brute creation, Landseer adds a felicity and truth in the imitation of surface and texture which few have equalled, of any school or country."

We have received from the publishers a large chromo, measuring nearly two by two and a half feet, of Landseer's 'Twins,' one of his best ;aintings. The original of this was formerly in the possession of George Stevenson, of the British Parliament, and is valued at about \$25,000. This chromo is furnished with T. DeWitt Talmage's paper, *The Christian at Work*, published at 102 Chambers' street, N.Y. Samples mailed free. See advertisement."

A Card.—From Prof. S. S. Packard, of Packard's Business College, N. Y.:—"Instead of going to Europe last spring, as directed by my physician, I went to THE BUTLER HEALTH LIFT. I think I did wisely, and so does the Doctor. I haven't enjoyed such continuous good health and spirits for five years. I am able to do more work in a month than I could last year in three; on account of the rest and vigor which have come from THE HEALTH LIFT."—*S. S. Packard.*

THE BUTLER HEALTH LIFT is a scientific system of concentrated and cumulative exercise, occupying the briefest time. Preserves and restores Health. Endorsed by the Medical Profession.

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LEWIS S. JONES, Manager.

Vacation Tour to Europe!—LONDON, THE RHINE, SWITZERLAND, PARIS!—Total Expense of Entire Trip, \$350 Currency. Circulars at J. W. SCHERMERHORN & Co.'s, 14 Bond St., New York. Sent on demand, with stamp.

The demand for bound volumes of the American Educational Monthly has been such that our supply of Vol. I, 1864, has become exhausted. Hence we shall be glad to purchase the numbers for 1864 from such of our subscribers as will part with them. Please communicate with J. W. Schermerhorn & Co., 14 Bond St., New York.

The Christian at Work.—Since the accession of HORACE C. KING as Publisher, *The Christian at Work* has been much enlarged and improved, and now offers a still greater variety of religious and literary articles, church and secular news, stories for children, etc. The editorials and regular weekly sermons of T. DE WITT TALMAGE, the special contributions of SPURGEON and BONAR, and the Serial story of MARION HABELAND, are special features of this excellent journal. The terms are \$3 per annum.